

RE: TRV update John Toll to:

Burt Shephard 01/21/2009 05:54 PM

Cc

Eric Blischke, "Wyatt, Robert", Keith Pine, Jennifer Woronets, Matt Luxon

From: John Toll < John T@windwardenv.com > Sort List...

To: Burt Shephard/R10/USEPA/US@EPA,

Cc: Eric Blischke/R10/USEPA/US@EPA, "Wyatt, Robert" <rjw@nwnatural.com>, Keith Pine <kpine@anchorenv.com>, Jennifer Woronets <jworonets@anchorenv.com>, Matt Luxon <MattL@windwardenv.com>

Thanks Burt. To be clear, our concerns about the last two PCB papers isn't whether they're good papers, it's about the way you're using them. We can agree that the papers are good. What we are questioning is not the papers, but the way you have used data from those papers to calculate tissue TRVs.

Berlin et al. (1981) showed that fry hatched from eggs from Lake Michigan lake trout (with a measured total PCB egg residue of 7.6 ppm and day-old fry residue of 3.8 ppm) chronically exposed to Aroclor 1254 water concentrations from 1x to 25x ambient concentrations in Great Lakes surface water (circa 1975) exhibited significant excess mortality. We're not questioning the quality or relevance of the paper's analysis for supporting the conclusions that the authors drew from it. We are saying that it is wrong to use of the data in Berlin et al. (1981) to calculate a tissue TRV because significant excess mortality occurred in days 57-96 and (to a lesser extent) days 97-136, but tissue residue wasn't measured until the end of the 176-day experiment, at which time the tissue residue was lower than at the beginning of the experiment.

Broyles and Noveck (1979) showed that sac-fry hatched from Lake Michigan lake trout and Chinook salmon (with total PCB egg residues estimated to be in the 3-11 ppm range) exposed to low ppb water concentrations of PCB 153 caused excess mortality. We're not questioning the quality or relevance of the paper's analysis for supporting the conclusions that the authors drew from it. We are saying that it is wrong to use of the data in Broyles and Noveck (1979) to calculate a tissue TRV because they only provide tissue residue data for the ¹⁴C-labeled PCB 153 fraction of the total PCB tissue residue.

John

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----Original Message----

From: Shephard.Burt@epamail.epa.gov [mailto:Shephard.Burt@epamail.epa.gov]

Sent: Wednesday, January 21, 2009 4:01 PM

To: John Toll

Cc: Blischke.Eric@epamail.epa.gov

Subject: TRV update

John,

You cut out while leaving your call back number, thus this e-mail.

We have reviewed all but two or three of the behavioral studies. Will be done with our recommendations to Eric tomorrow.

On the last two PCB papers, EPA believes both are good papers, and should be included in the fish TRV calculations for PCBs. Eric will send formal notice of this decision to LWG, but he indicated to me on the phone after you called earlier today I could send you an e-mail with the decision.

Best regards,

Burt Shephard Risk Evaluation Unit Office of Environmental Assessment (OEA-095) U.S. Environmental Protection Agency, Region 10 1200 6th Avenue Seattle, WA 98101

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"If your experiment needs statistics to analyze the results, then you ought to have done a better experiment"

- Ernest Rutherford